

IN THE CLAIMS:

Please amend Claims 1-5, 7, 8, 12-15, 17-18, and add new Claim 20, as follows:

1. (Currently Amended) A process for separating ethyl or methyl ester fraction enriched in EPA (eicosapentaenoic acid, C20:5) and a free fatty acid fraction enriched in DHA (docosahexaenoic acid, C22:6) from a mixture of such compounds that has been obtained by ~~from a~~ direct esterification of fish oil free fatty acids with a ethanol or methanol using lipase, said process comprising the step of subjecting said mixture to ~~by~~ molecular distillation.

2. (Currently Amended) A process according to claim 1, wherein said mixture of said EPA and DHA compounds has been ~~the fish oil free fatty acid starting material~~ ~~is~~ obtained by a lipase catalysed alcoholysis of fish oil triglycerides, a subsequent molecular distillation that yields a residual glyceride mixture, and hydrolysis of the residual glyceride mixture ~~mixture~~s.

3. (Currently Amended) A process for treating ~~esterifying~~ a marine oil composition containing EPA and DHA as C_n alkyl esters of fatty acids (n = 2-18) to form (1): a C_n alkyl ester fatty acid fraction (n = 2-18) enriched in DHA as compared to the starting material and a C_m alkyl ester fatty acid fraction (m = 1-12; n > m) enriched in EPA as compared to the starting material, or (2): a C_n alkyl ester fatty acid fraction (n = 2-18) enriched in both DHA and EPA as compared to the starting material and a C_m alkyl ester fatty acid fraction (m = 1-12; n > m) lower in both DHA and EPA as compared to the starting material comprising the step of reacting said marine oil composition with a C_m

alcohol ($m = 1-12$; $n > m$) in the presence of a lipase catalyst under essentially organic solvent-free conditions, and separating the fractions by molecular distillation.

4. (Currently Amended) A process according to claim 3, wherein the starting mixture of material; C_2-C_{18} alkyl esters ester; is obtained by a lipase catalysed alcoholysis of fish oil triglycerides, a subsequent molecular distillation that yields a residual glyceride mixture, and alcoholysis of the residual glyceride mixture with a C_2-C_{18} alkyl alcohol.

5. (Currently Amended) A process according to claim 3 ~~and 4~~, wherein the C_2-C_{18} alkyl ester is hexyl ester.

6. (Original) A process according to claim 3, wherein the C_1-C_{12} alcohol is ethanol.

7. (Currently Amended) A process according to claim 3, wherein ~~were~~ said lipase catalyst is Rhizomucor miehei lipase (MML), Thermomyces lanuginosa lipase (TLL), Pseudomonas sp. lipase (PSL) or Pseudomonas fluorescens lipase (PFL).

8. (Currently Amended) A process according to claim 1, wherein the molar ratio of methanol or ethanol to free fatty acids that is used in the direct-esterification step in the starting composition is from 0.5 to 10.0.

9. (Original) A process according to claim 8, wherein the molar ratio is from 0.5 to 3.0.

10. (Original) A process according to claim 8, wherein the molar ratio is from 1.0 to 2.0,

11. (Original) A process according to claim 8, wherein the molar ratio is from 0.5 to 1.5.

12. (Currently Amended) A process according to claim 3, wherein the molar ratio of C₁-C₁₂ alcohol to C₂-C₁₈ alkyl ester that is used in the lipase-catalyzed reacting step is from 0.5 to 10.0.

13. (Currently Amended) A process according to claim 12, wherein the molar ratio of C₁-C₁₂ alcohol to C₂-C₁₈ alkyl ester is from 0.5 to 3.0.

14. (Currently Amended) A process according to claim 12, wherein the molar ratio of C₁-C₁₂ alcohol to C₂-C₁₈ alkyl ester is from 2.0 to 3.0.

15. (Currently Amended) A process according to any of claims 1-14 and 20 ~~preceding claim~~, wherein the esterification reaction is conducted at a temperature of 0°C to 70°C.

16. (Original) A process according to claim 15, wherein the esterification reaction is conducted at a temperature of 20°C to 40°C.

17. (Currently Amended) A process according to any of claims 1-14 ~~preceding claim~~, wherein said lipase catalyst is immobilized on a carrier.

18. (Currently Amended) A process according to claim 1, wherein said lipase is one that catalyses the alcoholysis of DHA at a much slower speed than it catalyzes the corresponding alcoholysis of EPA.

19. (Original) A process according to claim 18, wherein said lipase catalyst is *Rhizomucor miehei* lipase (MML) or *Thermomyces lanuginosa* lipase (TLL).

20. (New) A process according to claim 4, wherein the C₂-C₁₈ alkyl ester is hexyl ester.

21. (New) A process according to claim 15, wherein said lipase catalyst is immobilized on a carrier.

22. (New) A process according to claim 16, wherein said lipase catalyst is immobilized on a carrier.